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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,438	06/01/2001	Larry A. Coldren	G&C 122.2-US-U1	1911

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EXAMINER

ZAHN, JEFFREY N

ART UNIT

PAPER NUMBER

2828

DATE MAILED: 11/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/872,438

Applicant(s)

COLDREN ET AL.

Examiner

Jeffrey N Zahn

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.


- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 14-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 27-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


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Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 and 7. 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Claims 14-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No.6.

Applicant's election with traverse of Claims 1-13 and 27-39 in Paper No. 6 is acknowledged. The traversal is on the ground(s) that M.P.E.P. sec. 801.01 is contrary to the rules of statutory construction. This is not found persuasive to the Examiner for purposes of this examination; because, I am bound to the rules/policies stated in the M.P.E.P.

In addition, the Examiner disagrees with the Applicant's assertion that "there is no serious burden" as related to the search of the two Groups as outlined in the restriction requirement of Paper No. 5. The inventions are a method of producing and product drawn to a semiconductor laser. These inventions require two independent searches that may yield common prior art; however, the searches involve two separate classifications and exclusive search limitations.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-13 and 27-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claims 1-13 and 27-29, it is unclear what the Applicant is claiming. Specifically, the following:

- 1) the cooperative relationship of the gain section as related to the other structural limitations (i.e. the phase section; waveguide section mirror, cavity, etc.);
- 2) the cooperative relationships of the cavity to the other structure of the claimed device;
- 3) how the claimed device functions to produce a tunable laser, (Claims 1-13) there is no mention of this feature in the body of the claim;
- 4) what includes the SCH? (the waveguide or cavity);
- 5) what elements comprise the cavity?

The language of Claims 1 and 27 makes it very unclear what the Applicant is claiming; the issues outlined above is not an exhaustive list.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 9, 10, 13 and 27-39, 35-36 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Coldren (US 4,896,325).

Regarding Claim 1-3, 13, 27-29, and 39 Coldren discloses a tunable laser (abstract) comprising:

- a gain section (36) for creating a light beam;
- a phase section (32) for controlling the light beam around a center frequency of the bandwidth;
- a waveguide (Fig. 5; between right and left mirrors) for guiding and reflecting the light beam in a cavity including a relatively low energy bandgap SCH (col. 6, line 37- col. 7, line 64);
- a front mirror (40) bounding an end of the cavity;
- a back mirror (42) bounding an opposite end of the cavity;
- wherein gain for the light beam is provided by reflecting light between the said mirrors (40)42).

Regarding Claims 9-10 and 35-36, these claims have added limitations consistent with a method or process claim. Accordingly, the added further method limitations are not given any patentable weight for purposes of examining the product claims they depend from.


Conclusion

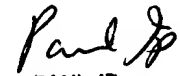
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yamamoto (US 5084894), Hirata (US 5145792), Hirayama et al. (US 5274649), Suzuki et al. (US 5347526), Weber (US 5379318), Maruska (US 5452118), Delorme et al. (US 5581572), Delorme (US 5838714), Hong et al. (US 5936994), Stegmüller (US 6066859) and Koren et al. (US 6208454).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey N Zahn whose telephone number is 703-305-3443. The examiner can normally be reached on M-F: 8:30-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on 703-308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


Jeffrey Zahn
October 30, 2002


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